

Name: \_\_\_\_\_

**Worksheet – Simplifying Rational Expressions – Version 2**

Directions: Please simplify the following expressions.

1.  $\frac{5x+25}{7x+35}$

2.  $\frac{-8y-12}{36+24y}$

3.  $\frac{b^2-25}{b^2+6b+5}$

4.  $\frac{m^2-5m-24}{m^2+8m+15}$

5.  $\frac{x^2+10x+25}{x^2+8x+15}$

6.  $\frac{8mb^3+16m^2b^2}{4mb^2+8bm^2}$

7.  $\frac{r^2-64}{r^2-16r+64}$

8.  $\frac{x^2-x-90}{x^2+11x+18}$

9.  $\frac{3b^2-9b-84}{b^2-7b}$

$$10. \frac{5k^2 - 80}{10k - 40}$$

$$11. \frac{49m^2 - 1}{7m^2 - 34m - 5}$$

$$12. \frac{6a^2b^2 - 24ab^3}{-6ab^2}$$

$$13. \frac{2x^2 - 7x - 4}{2x^2 + 7x + 3}$$

$$14. \frac{5y^2 - 2y - 3}{y^2 - 2y + 1}$$

$$15. \frac{3y^2 - 27y + 42}{2y^2 - 13y - 7}$$